

Coastal Protection and Restoration Authority of Louisiana

Office of Coastal Protection and Restoration

2008 Annual Inspection Report

Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass Restoration

State Project Number BA-38 Priority Project List 11

July 13, 2009 Plaquemines Parrish

Prepared by:

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I. Introduction

The Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass Restoration (BA-38) has one project area located between Pass La Mer and Chaland Pass (Chaland Headland) and is located at the approximate coordinates 30° 08' 00" N latitude and 92° 45' 00" W longitude. The other project area is located at Pelican Island between Fontanille Pass (Empire Waterway) and Scofield Pass along the Plaquemines barrier shoreline and is located at the approximate coordinates 30° 08' 00" N latitude and 92° 45' 00" W longitude. Both project areas are located in Plaquemines Parish.

II. Project Description and History

The Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass Restoration (BA-38) consists of nourishing and rebuilding the shoreline with sediment to create a beach berm, dune, and a back barrier marsh platform. The wetlands, dune, and swale habitats within the project area have undergone substantial loss due to oil and gas activities, subsidence, sea-level rise, and marine and wind induced shoreline erosion. Marine processes acting on the abandoned deltaic headlands and barrier islands rework and redistribute the previously deposited sediment. In these areas along the shoreline, there are several locations where the shoreline has receded and decreased to a critical width that is susceptible to breaching during storms. The short term land loss rate for the Pass La Mer to Chaland Pass area is -46.6 acres per year or 3.36% per year. The short term land loss rate for the Fontanelle Pass to Scofield Pass reach is -20.79 acres per year or 4.36% per year.

Construction of the Pass La Mer to Chaland Pass Restoration Project (BA-38-2) was completed in January, 2007. At this time construction has not begun on the Pelican Island Restoration Project (BA-38-1).

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Pass La Mer to Chaland Pass Restoration Project (BA-38-2) is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, the OCPR shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan). The annual inspection report also contains a summary of maintenance projects and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A summary of past operation and maintenance projects completed since completion of the project can be found in Section II.

An inspection of the Chaland Headland Project (BA-38-2) was held on September 25, 2008, by representatives of the OCPR Barry Richard and Brady Carter, and Rachel Sweany representing National Marine Fisheries Service (NMFS). This inspection was prompted by the coastal Louisiana landfall of Hurricanes Gustav and Ike. Photographs of that inspection are included in Appendix B of this report.

IV. Inspection Results

Sand Fence

All of the sand fencing was relocated outside of the project area by the storms. (Photo #1)

Containment Dike

The containment dike was not degraded upon demobilization from the construction site. During the period between demobilization and this inspection the dike has been slowly degrading due to natural processes. In May, 2008, members of the OCPR and NMFS hydraulically cut 4 gaps into the containment dike using a high pressure pump. At the time of the inspection these gaps were larger and allowing water to exchange between the project area and outer marshes and canals. Photos #2 and 3)

Settlement Plates

One settlement plate was turned on its side (Photo #4). The other six are undamaged.

Vegetative Plantings

Most of the vegetative plantings were damaged due to the storms.

V. Conclusions

The Chaland Headland Project area took a big hit during the 2008 hurricane season. The sand fencing will require replacement as well as the vegetative plantings since most of those were displaced. The remaining settlement plates will continue to be surveyed as scheduled while the damaged plate should be removed. A good majority of the beach material is now located within the marsh template and some can be found farther north of the project area. The project will continue to be monitored for any changes and the required maintenance work should be performed in a timely manner.

VI. Recommendations

It is the recommendation of the OCPR/NOFO that the sand fencing and vegetative plantings be replaced as necessary.

Immediate Repairs

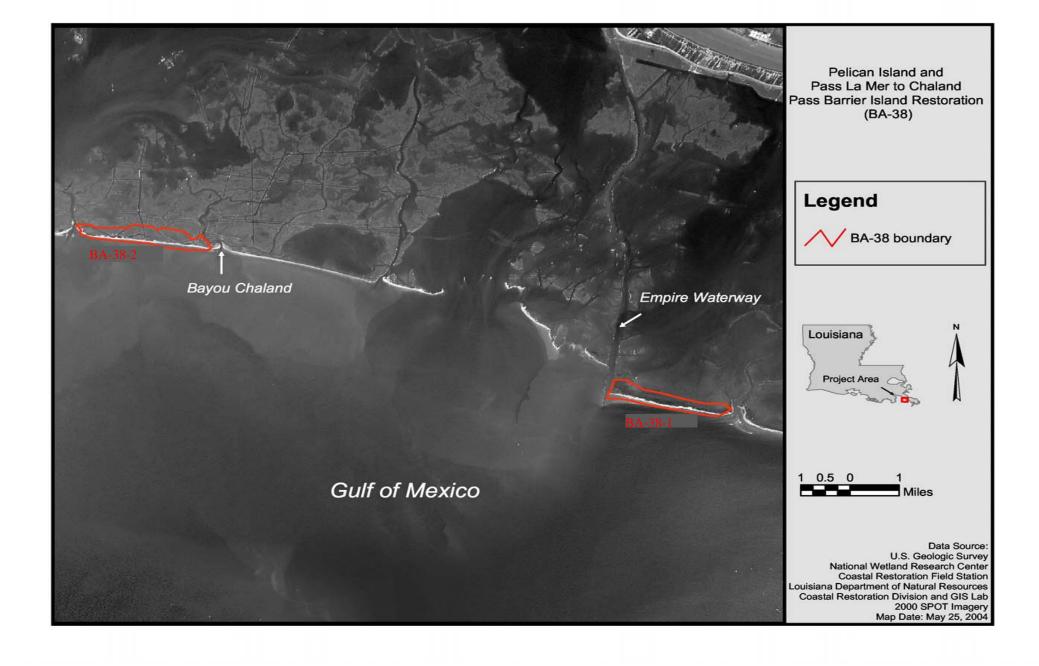
• Sand Fencing and Vegetative Plantings.

Programmed Maintenance

• No Programmed Maintenance is scheduled at this time.

Appendix A

Project Features Map



Appendix B

Photographs



Photo #1 -Damage to Sand Fence (now in surf line).



Photo #2 - Hydraulic Dike Gapping.



Photo #3 – Dike Gap (at 6 months).



Photo #4 – Settlement Plate (overturned).

Appendix C

Three Year Budget Projection

Pelican Island and Pass La Mer to Chaland Pass Restoration Project (BA-38) / PO-24 / PPL 8 Three-Year Operations & Maintenance Budgets 07/01/2009 - 06/30/2012

Project Manager	O & M Manager	Federal Sponsor	Prepared By
Barry Richard	Barry Richard	NMFS	Barry Richard
Maintenance Inspection General Maintenance Structure Operation Administration Maintenance/Rehabilitation	\$6,244.00 \$0.00 \$0.00 \$0.00	\$6,369.00 \$0.00 \$0.00 \$0.00	\$6,406.00 \$0.00 \$0.00 \$0.00
09/10 Description:			
E&D Construction Construction Oversight Sub Total - Maint. And Rehab. 10/11 Description	\$0.00 \$0.00		
10/11 Description			
E&D Construction Construction Oversight	Sub Total - Maint. And Rehab.	\$0.00 \$0.00 \$0.00 \$ -	
11/12 Description:			
E&D Construction Construction Oversight		Sub Total - Maint. And Rehab.	\$0.00 \$0.00 \$0.00 \$ -
	2009/2010	2010/2011	2011/2012
Total O&M Budgets	\$ 6,244.00	\$ 6,369.00	\$ 6,406.00
O &M Budget (3 yr Tota Unexpended O & M Bu Remaining O & M Budg	dget		\$ 19,019.00 \$ 1,297,500.00 \$ 1,278,481.00

OPERATION AND MAINTENANCE BUDGET WORKSHEET 2009/2010

Pelican Island and Pass La Mer to Chaland Pass Restoration Project (BA-38) / PO-24 / PPL 8

DESCRIPTION	UNIT	EST.	UNIT PRICE	ESTIMATED
DESCRIPTION	UNII	QTY.	UNII PRICE	TOTAL
O&M Inspection and Report	EACH	1	\$6,244.00	\$6,244.00
General Structure Maintenance (Radio Equip.)	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$0.00	\$0.00
Operations	LUMP	1	\$0.00	\$0.00
Construction Oversight	LUMP	1	\$0.00	\$0.00
	Į.	DMINISTR	ATION	
LDNR / CRD Admin.	LUMP	0	\$0.00	\$0.00
FEDERAL SPONSER Admin.	LUMP	0	\$0.00	\$0.00
SURVEY Admin.	LUMP	0	\$0.00	\$0.00
OTHER				\$0.00
	\$0.00			

MAINTENANCE / CONSTRUCTION

	SURVET							
SURVEY DESCRIPTION:								
	Secondary Monument	EACH	0	\$0.00	\$0.00			
	Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00			
	Marsh Elevation / Topography	LUMP	0	\$0.00	\$0.00			
	TBM Installation	EACH	0	\$0.00	\$0.00			
	OTHER				\$0.00			
		TOTAL SURVEY COS						

GEOTECHNICAL

	020120111012				
GEOTECH			<u> </u>		
DESCRIPTION:					
	Borings	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
		\$0.00			

CONSTRUCTION

	CONSTRUCTION					
CONSTRUCTION						
DESCRIPTION:						
	Rip Rap	LIN FT	TON/FT	TONS	UNIT PRICE	
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
	Filter Cloth / Geogrid Fabric		SQ YD	0	\$0.00	\$0.00
	Navagation Aid		EACH	0	\$0.00	\$0.00
	Signage		EACH	0	\$0.00	\$0.00
	General Excavation / Fill		CU YD	0	\$0.00	\$0.00
	Dredging		CU YD	0	\$0.00	\$0.00
	Sheet Piles (Lin Ft or Sq Yds)			0	\$0.00	\$0.00
	Timber Piles (each or lump sum)			0	\$0.00	\$0.00
	Timber Members (each or lump sum)			0	\$0.00	\$0.00
	Hardware		LUMP	1	\$0.00	\$0.00
	Materials		LUMP	1	\$0.00	\$0.00
	Mob / Demob		LUMP	1	\$0.00	\$0.00
	Contingency		LUMP	1	\$0.00	\$0.00
	General Structure Maintenance		LUMP	1	\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
				TOTAL CO	NSTRUCTION COSTS:	\$0.00

TOTAL OPERATIONS AND MAINTENANCE BUDGET:

OPERATION AND MAINTENANCE BUDGET WORKSHEET 2010/2011

Pelican Island and Pass La Mer to Chaland Pass Restoration Project (BA-38) / PO-24 / PPL 8

DESCRIPTION	UNIT	EST.	UNIT PRICE	ESTIMATED
		QTY.		TOTAL
O&M Inspection and Report	EACH	1	\$6,369.00	\$6,369.00
General Structure Maintenance	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$0.00	\$0.00
Operations	LUMP	1	\$0.00	\$0.00
Construction Oversight	LUMP	1	\$0.00	\$0.00
	A	DMINISTR	RATION	
LDNR / CRD Admin.	LUMP	1	\$0.00	\$0.00
FEDERAL SPONSER Admin.	LUMP	0	\$0.00	\$0.00
SURVEY Admin.	LUMP	0	\$0.00	\$0.00
OTHER				\$0.00
		TOTAL ADM	MINISTRATION COSTS:	\$0.00

MAINTENANCE / CONSTRUCTION

CLIDVEV

	SURVET				
SURVEY DESCRIPTION:					
	Secondary Monument	EACH	0	\$0.00	\$0.00
	Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00
	Marsh Elevation / Topography	LUMP	0	\$0.00	\$0.00
	TBM Installation	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
	_	•	TC	TAL SURVEY COSTS:	\$0.00

GEOTECHNICAL

GEOTECH DESCRIPTION:							
	Borings	EACH	0	\$0.00	\$0.00		
	OTHER				\$0.00		
		TOTAL GEOTECHNICAL CO					

	CONSTRUCTION					
ONSTRUCTION DESCRIPTION:	Repair of storm damage to valves, fencir	ng, and emb	oankment. Re	eplacemen	t of storm damaged	gate actuator.
	Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE	
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
	Filter Cloth / Geogrid Fabric		SQ YD	0	\$0.00	\$0.00
	Navagation Aid		EACH	0	\$0.00	\$0.00
	Signage		EACH	0	\$0.00	\$0.00
	General Excavation / Fill		CU YD	0	\$0.00	\$0.00
	Dredging		CU YD	0	\$0.00	\$0.00
	Sheet Piles (Lin Ft or Sq Yds)			0	\$0.00	\$0.00
	Timber Piles (each or lump sum)			0	\$0.00	\$0.00
	Timber Members (each or lump sum)			0	\$0.00	\$0.00
	Hardware- Gate Actuator, gate sleeves		LUMP	1	\$0.00	\$0.00
	Materials		LUMP	1	\$0.00	\$0.00
	Mob / Demob		LUMP	1	\$0.00	\$0.00
	Contingency		LUMP	1	\$0.00	\$0.00
	General Structure Maintenance		LUMP	1	\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
				TOTAL CO	NSTRUCTION COSTS:	\$0.00

TOTAL OPERATIONS AND MAINTENANCE BUDGET:

\$6,369.00

OPERATION AND MAINTENANCE BUDGET WORKSHEET 2011/2012

Pelican Island and Pass La Mer to Chaland Pass Restoration Project (BA-38) / PO-24 / PPL 8

DESCRIPTION	UNIT	EST.	UNIT PRICE	ESTIMATED
BESSIAN FISH	Oilli	QTY.	OIIII T IIIOE	TOTAL
O&M Inspection and Report	EACH	1	\$6,406.00	\$6,406.00
General Structure Maintenance (Radio Equip.)	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$0.00	\$0.00
Operations	LUMP	1	\$0.00	\$0.00
Construction Oversight	LUMP	1	\$0.00	\$0.00
	Į.	DMINISTR	ATION	
LDNR / CRD Admin.	LUMP	0	\$0.00	\$0.00
FEDERAL SPONSER Admin.	LUMP	0	\$0.00	\$0.00
SURVEY Admin.	LUMP	0	\$0.00	\$0.00
OTHER				\$0.00
	\$0.00			

MAINTENANCE / CONSTRUCTION

SURVEY

SURVEY DESCRIPTION:					
	Secondary Monument	EACH	0	\$0.00	\$0.00
	Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00
	Marsh Elevation / Topography	LUMP	0	\$0.00	\$0.00
	TBM Installation	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
		\$0.00			

GEOTECHNICAL

GEOTECH					
DESCRIPTION:					
•	Borings	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
	TOTAL GEOTECHNICAL COSTS:				\$0.00

	CONSTRUCTION					
CONSTRUCTION						
DESCRIPTION:						
	Rip Rap	LIN FT	TON/FT	TONS	UNIT PRICE	
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
	Filter Cloth / Geogrid Fabric	SQ YD	0	\$0.00	\$0.00	
	Navagation Aid	EACH	0	\$0.00	\$0.00	
	Signage	EACH	0	\$0.00	\$0.00	
	General Excavation / Fill	CU YD	0	\$0.00	\$0.00	
	Dredging	CU YD	0	\$0.00	\$0.00	
	Sheet Piles (Lin Ft or Sq Yds)		0	\$0.00	\$0.00	
	Timber Piles (each or lump sum)			0	\$0.00	\$0.00
	Timber Members (each or lump sum)		0	\$0.00	\$0.00	
	Hardware	LUMP	1	\$0.00	\$0.00	
	Materials	LUMP	1	\$0.00	\$0.00	
	Mob / Demob	LUMP	1	\$0.00	\$0.00	
	Contingency	LUMP	1	\$0.00	\$0.00	
	General Structure Maintenance	LUMP	1	\$0.00	\$0.00	
	OTHER				\$0.00	\$0.00
	OTHER			\$0.00	\$0.00	
	OTHER			\$0.00	\$0.00	
				TOTAL CO	NSTRUCTION COSTS:	\$0.00

TOTAL OPERATIONS AND MAINTENANCE BUDGET:

\$6,406.00

Appendix D

Field Inspection Form

MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No./Name: (BA-38-2) Pass La Mer to Chaland Pass Restoration Date of Inspection: 9/25/2008 Time: 10:00am

Structure No. n/a Inspector(s): Richard, Carter, Sweeney

Structure Description: n/a Water Level N/A

Type of Inspection: Post Storm Weather Conditions: Mild, sunny

Item	Condition	Pysical Damage	Corrosion	Photo #	Observations and Remarks
Sand Fencing	Bad			1	This feature is no longer present in the project area.
Containment Dike	Good			2, 3	Gaps created.
Settlement Plates	Fair			4	One is turned on its side, the other 6 are ok.
Plantings	Bad				Most plantings damaged.